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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,789	03/30/2005	Shigeru Endo	P27672	1533
7055 7590 12/31/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER WOLFE, DEBRA M	
			ART UNIT 3725	PAPER NUMBER
			NOTIFICATION DATE 12/31/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/529,789

Applicant(s)

ENDO, SHIGERU

Examiner

Debra M. Wolfe

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-11 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 12, 13 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____



FINAL REJECTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Perrault et al (US Patent # 4,266,310). Perrault et al discloses a method of processing a product comprising the steps of separating a raw material for the product from a work piece (23) comprising the raw material by forming a slit in the work piece (23) while leaving a micro joint connection connecting the raw material and the work piece (23), positioning a portion of the raw material on a lower metal mold (132) and bending the portion of the raw material downward using an upper metal mold (137) while maintaining the micro joint connection between the raw material and the work piece (23) and dropping the product by separating the micro joint connection between the raw material and the work piece (23) [See FIG 9].

In reference to claim 8, Perrault et al discloses bending the portion of raw material at an angle greater than 90 degrees [See FIG 8].

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

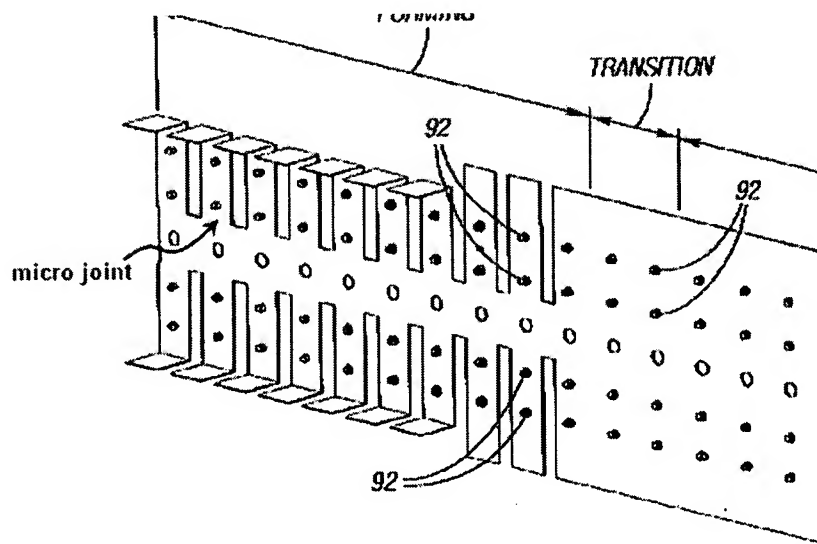
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for



patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 7 is rejected under 35 U.S.C. 102(e) as being anticipated by Cutshall et al (US PGPub 2003/0115926). Cutshall et al discloses a method of processing a product, comprising separating a raw material for the product from a work piece comprising the raw material by forming a slit in the work piece while leaving a micro joint connection connecting the raw material and the work piece, positioning a portion of the raw material on a lower metal mold (86) and bending the portion of the raw material downward using an upper metal mold (84) and the lower metal mold (86), while maintaining the micro joint connection between the raw material and the work piece [See FIG 5] and dropping the product by separating the micro joint connection between the raw material and the work piece [See lines 8-13 of paragraph 0033].





Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 9-11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cutshall et al in view of Costabile (US Patent # 5,640,873). Cutshall et al discloses the invention substantially as claimed (see paragraph 2 above) except for wherein the upper metal mold has a specific structure. However, Cutshall et al does disclose that the upper metal mold (84) and the lower metal mold (86) can be changed for any desired finished part [See lines 4-5 of paragraph 0033]. Costabile teaches of using an upper metal mold [See FIG 1] comprising of a punch clip (14) attached to a lower surface of a vertically movable punch body (plates 10, 11, 12), movable to a first side with respect to the punch body (plates 10-12) and comprising a protruding bending process portion that protrudes to the first side at a lower end of the punch clip (14) in order to compensate for spring back when bending sheet metal [See FIG below]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the upper and lower metal mold of Cutshall et al with the upper and lower metal mold of Costabile in order to compensate for spring back when bending the work piece.

In reference to claim 10, Costabile further discloses the portion of the raw material is bent downward greater than 90 degrees as the punch chip (14) moves to the first side with respect to the punch body (plates 10-12) is moved vertically.



In reference to claim 11, Costabile further discloses the upper metal mold having a pressure moving mechanism (motive power means) for pressure moving the punch clip (14) to the first side when the punch body (plates 10-12) moves vertically [See col. 4 lines 5-12].

In reference to claim 14, Costabile further discloses a portion of raw material is bent downward into a die hole (21) of a die main body (20).

In reference to claim 15, the portion of the raw material is bent downward along a bending process edge of the die hole, as seen in figure 4 of Costabile.

In reference to claim 16, the bending process edge is formed as an inclined surface of the die hole of the die main body, as seen in figure 4 of Costabile.

Allowable Subject Matter

Claims 12, 13 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Wolfe whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 7am - 4:30pm with alternating Friday 7am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Application/Control Number: 10/529,789
Art Unit: 3725

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Debra M Wolfe", is positioned above the printed name.

Debra M Wolfe
Examiner
Art Unit 3725

A handwritten signature in black ink, appearing to read "Derris H. Banks", is positioned above the printed name.

DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700